**Claims:**

1. A pepsin-sensitive modified Cry protein, characterized in that it has at least one additional pepsin cleavage site.

2. The modified Cry protein as claimed in claim 1, characterized in that the additional pepsin cleavage site is represented by an amino acid residue chosen from leucine, phenylalanine and glutamic acid residues.

3. The modified Cry protein as claimed in either of claims 1 and 2, characterized in that it is selected from the Cry1, Cry3, Cry4, Cry7, Cry8, Cry9, Cry10, Cry16, Cry17, Cry19 and Cry20 proteins.

4. The modified Cry protein as claimed in claim 3, characterized in that it is a Cry9C protein.

5. The modified Cry protein as claimed in claim 4, characterized in that it is the Cry9Ca1 protein.

6. The modified Cry protein as claimed in one of claims 1 to 5, characterized in that it has at least one additional pepsin cleavage site in at least one of the inter-α-helix loops of domain I.

7. The modified Cry protein as claimed in one of claims 1 to 6, characterized in that it has at least one additional pepsin cleavage site in the inter-α-helix loop linking the α3 and α4 helices of domain I.

8. The modified Cry protein as claimed in one of claims 5 to 7, characterized in that it has an additional pepsin cleavage site at position 164.

9. The modified Cry protein as claimed in claim 8, characterized in that it is selected from the Cry proteins, the sequences of which are represented by the identifiers SEQ ID NO:4, SEQ ID NO:6 or SEQ ID NO:8.

10. The modified Cry protein as claimed in one of claims 1 to 5, characterized in that the additional pepsin cleavage sites are introduced by substituting aspartic acid residues with glutamic acid residues, substituting tryptophan residues with phenylalanine residues, and substituting valine or isoleucine residues with leucine residues.

11. The modified Cry protein as claimed in claim 11, characterized in that the degree of substitutions which said Cry protein possesses is 25%.

12. A method for increasing the pepsin sensitivity of the Cry proteins, characterized in that at least one additional pepsin or cleavage site is introduced into said Cry proteins.

13. The method as claimed in claim 12, characterized in that the additional pepsin cleavage site introduced is represented by an amino acid chosen from leucine, phenylalanine and glutamic acid residues.

14. The method as claimed in either of claims 12 and 13, characterized in that it applies to the Cry proteins selected from the Cry1, Cry3, Cry4, Cry7, Cry8, Cry9, Cry10, Cry16, Cry17, Cry19 and Cry20 proteins.

15. The method as claimed in claim 14, characterized in that it applies to the Cry9C protein.

16. The method as claimed in claim 15, characterized in that it applies to the Cry9Ca1 protein.

17. The method as claimed in one of claims 12 to 16, characterized in that at least one additional pepsin cleavage site is introduced into at least one of the inter-α-helix loops of domain I of said Cry proteins.

18. The method as claimed in one of claims 12 to 17, characterized in that at least one additional pepsin cleavage site is introduced into the inter-α-helix loop linking the α and α4 helices of domain I.

19. The method as claimed in one of claims 16 to 18, characterized in that an additional pepsin cleavage site is introduced at position 164.

20. The method as claimed in one of claims 12 to 16, characterized in that the additional pepsin cleavage sites are introduced by substituting aspartic acid residues with glutamic acid, substituting tryptophan residues with phenylalanine residues, and substituting valine or isoleucine residues with leucine residues.

21. The method as claimed in claim 20, characterized in that the degree of substitution which said Cry protein possesses is less than or equal to 25%.

22. A polynucleotide encoding a modified Cry protein as claimed in one of claims 1 to 11.

23. A chimeric gene comprising, functionally linked to one another, at least:

(a) one promoter which is functional in a host organism
(b) a polynucleotide as claimed in claim 22
(c) a terminator element which is functional in a host organism.

24. The chimeric gene as claimed in claim 23, characterized in that the promoter and the terminator element are functional inplants.

25. An expression or transformation vector containing a chimeric gene as claimed in either of claims 23 and 24.

26. The vector as claimed in claim 27, characterized in that it is a plasmid, a phase or a virus.

27. A host organism transformed with one of the vectors as claimed in either of claims 25 and 26.

28. The host organism as claimed in claim 27, characterized in that it is a plant.

29. The plant as claimed in claim 28, characterized in that it contains, in addition to a chimeric gene as claimed in either of claims 23 and 24, at least one other chimeric gene containing a polynucleotide encoding a protein of interest.

30. A part of a plant as claimed in claim 29.

31. A seed from a plant as claimed in claim 29.

32. A method for producing the modified Cry proteins as claimed in one of claims 1 to 11, characterized in that it comprises at least the steps of:

(a) culturing a transformed host organism according to the invention in a culture medium suitable for the growth and for the multiplication of said organism,

(b) (b) extracting the Cry proteins produced by the transformed organism cultured in step (a).

33. The method as claimed in claim 32, characterized in that it comprises a step (c) of purification of the Cry proteins extracted in step (b).

34. The method as claimed in either of claims 32 and 33, characterized in that the host organism is a microorganism.

35. The method as claimed in claim 34, characterized in that the host organism is a *Bacillus thuringiensis* bacterium.

36. A monoclonal or polyclonal antibody, characterized in that it is directed against a modified Cry protein as claimed in one of claims 1 to 11.